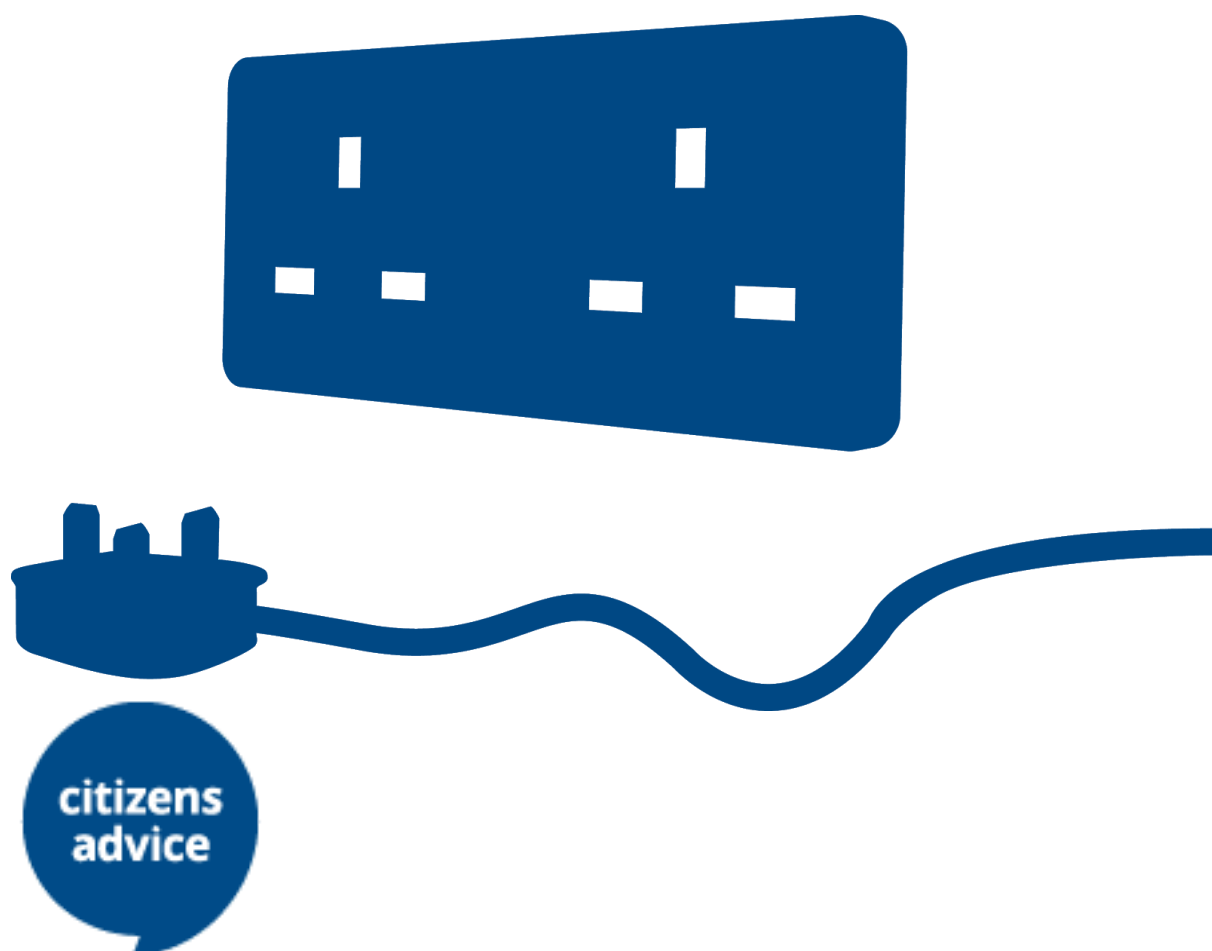


Ofgem Key enablers for DSO programme of work and the Long Term Development statement consultation

Citizens Advice submission
February 2020



Citizens Advice welcomes the opportunity to respond to this consultation as part of its statutory role to represent domestic and small business energy consumers in Great Britain (GB). Our response is not confidential and may be freely published.

Consultation questions

Part 1 - The Long Term Development Statement

Question 1: We consider that improvement is required in the visibility of DG and LCTs connected to the distribution network. In addition to DG and LCT connections, can you identify areas for improvement in the current data that is shared in the LTDS?

We agree that there is a need for improved visibility of Distributed Generation (DG) and Low Carbon Technologies (LCT) connected to the distribution network. Greater visibility is important to assist the development of a more effective energy system involving greater levels of DG and LCTs, and to facilitate a flourishing and deep flexibility market. It may be useful to incorporate further data within the LTDS, some of which is currently captured within the DFES. This data could include, for example:

- Cross infrastructure data from industries such as water, communications, transport, waste, etc. This data may help to minimise disruption and cost to consumers caused by groundworks.
- Planning data from local authorities to show how the energy system may be changing in the future.
- Asset monitoring data from technical assets such as smart meter metrics, usage of storage, etc. This may enable opportunities or innovative solutions to be identified.
- Market data such as flexibility contract information and usage statistics.
- Demographic data to show predicted changes in usage and identify potential future constrained areas.

We support this consultation in addressing the need to reform the Long Term Development Statement (LTDS) and incorporate new forecasting elements, such as the Distribution Future Energy Scenarios (DFESs), which may play an increasing part in electricity Distribution Network Operators' (DNOs) business planning.

Question 2: Can you identify areas for improvement in the presentation of network information in the current FoS?

No response provided.

Question 3: The EDTF and others have identified the need to collate and share 11kV and lower voltage network data. Is there value in creating a sharing mechanism for 11kV and LV network data ahead of the expected roll out of network monitoring and telemetry in RIIO-ED2 and the limited data availability in RIIO-ED1?

It would be valuable to create a data sharing mechanism for the 11kV and LV networks ahead of ED2. Delaying data sharing may have a negative effect on the establishment of effective innovation and competition by third parties, and delay both the development of the flexibility market and the progression of further embedded generation at the distribution level. These activities will be needed to facilitate a rapid transition to a net zero carbon future by 2050.

Question 4: Given the complexity of future distribution networks, static data alone may not satisfy user needs. Should the FoS be enhanced to mandate the development of a common network model to allow power system simulation that each licensee must make available for exchange to users and interested parties? If so, what do you consider to be an appropriate standard?

No response provided.

Question 5: From a review of industry publications we consider that interoperable standards will underpin future DSO activities. Should the FoS mandate the adoption of a IEC 61970 CIM and IEC 61968 CIM for Distribution Management, such that data is collated and constructed in a manner similar to WPDs CIM innovation project model? Are these standards mature and what are the likely benefits and costs?

We support the development of common interoperable standards for data collation and sharing which should facilitate a more efficient energy system and developed flexibility market. We note from the consultation that there appear to be few alternatives available other than the CIM for Electricity interoperable standard although the industry may have developed other in-house protocols that may be useful. We do not have a further opinion regarding the appropriate standard to be adopted.

Question 6: Should the FoS also be retained in its current Microsoft Excel form? Is there value in this format?

No response provided.

Question 7: Ensuring network information remains accessible is a priority. At present there is no formal requirement for the production of heatmaps. In order to ensure future customer can access the required data, should the scope of the LTDS and FoS be extended to mandate the production of heatmaps?

We are aware that heatmaps are a welcome facility available by DNOs to interested parties, usually available via the DNOs' websites. It would be valuable to have the heatmaps become a mandated requirement under the scope of the LTDS and FoS. We recommend that comprehensive stakeholder engagement is undertaken by DNOs to identify the needs of current and potential users of heatmaps and how the heatmaps could be redesigned to meet their requirements.

Question 8: Would there be benefit to adopting common guidance or formats on information presentation within heatmaps, including the presentation of technical information and cost information? What are the barriers to its adoption?

We support the use of a common minimum standard format for heatmaps including its underlying technical and cost information. The use of a minimum standard format across all DNOs will facilitate ease of accessibility and understanding by developers, prospective generators, community energy groups, and those interested in entering the flexibility market.

Question 9: The core focus of the LTDS is to assist users to enter into arrangements with the licensee and evaluate the opportunities for doing so. Should the scope of the heatmaps include other network needs, such as flexibility requirements? What is the best mechanism to notify network users of opportunities to enter arrangements with the licensees?

We believe the scope of the heatmaps would be enhanced by reflecting the needs of smaller potential flexibility market entrants and community energy groups. We recommend that the consultation ensures that the needs of potential smaller players are also adequately captured.

Question 10: On what frequency should these maps be updated? Should they be updated as there are changes to the underlying data or periodically?

There may be increased costs to consumers if the changes to the heatmaps are updated on a continuous and immediate basis. However, very long periods between updating may be detrimental to the needs of developers, generators, community energy groups, and flexibility providers. Periodic updates may be the best solution (such as quarterly), however, we await the responses of the DNO industry to evaluate the costs versus the benefits relating to the frequency of such heatmap updates.

Question 11: Is there a need for a common methodology or principles for estimating load growth? What potential role could the D-FES play in informing the load growth forecasts on the LTDS?

At present, it appears that the development of the DFES is not directly linked to the LTDS. As the DFES appears to be a key element in developing the potential infrastructure needs within the DNO business plans, we would welcome a cohesive link between the DFES and LTDS to ensure that they are both underpinned by common guidance principles and assurance mechanisms. A common methodology for estimating load growth is welcomed.

Question 12: Are there any lessons that can be learned from other industry documents such as the ETYS and the NG FES?

No response provided.

Question 13: Do you agree that the LTDS should be enhanced to present the key assumptions for network requirements forecasting and the uptake in LCTs, or is this a role better served by the D-FES or other documents?

See answer to Question 11.

Question 14: Forecasting tools have been a focus of a number of innovation projects. Are there any mature tools or techniques that could be adopted to enhance the transparency or robustness of the load growth forecasts?

No response provided.

Question 15: Do you agree that IDNOs should be issued with a direction to produce a LTDS?

Independent Distribution Network Operators (IDNOs) are an increasing part of the network. As such, IDNOs are required to play their part in enabling the transition to a net zero carbon future with the potential need for improved planning processes and system operation. Fundamentally, consumers and customers of IDNOs should not feel the difference between them and a DNO.

Some IDNOs are of a substantial size whereas others may be much smaller. As IDNOs cannot charge more than the equivalent regional DNO costs to IDNO consumers, there may be minimal or no bill impact for consumers if the IDNOs are required to produce some form of LTDS. However, smaller IDNOs may find the regulatory and cost burden of LTDS production to be high. As such, subject to establishment of the likely regulatory and cost implications, we believe that it would be appropriate for the larger IDNOs to be issued with a direction to produce a LTDS. Smaller IDNOs, with more restricted resources, could be exempted, pending satisfactory justification.

If this 'larger versus smaller' IDNO distinction is made in LTDS requirements, we would recommend further consultation to determine the appropriate size of IDNO that could be exempted.

Question 16: What summary information should IDNOs publish? This is currently found in section one of the LTDS FoS, such as information relating to the design and operation of all voltage levels of the distribution network. Please explain your reasoning.

No response provided.

Question 17: What information on network data should IDNOs publish? This is currently found in section two of the LTDS FoS. Please explain your reasoning.

No answer provided.

Question 18: Do you agree with our proposal on how the LTDS delivery body should be convened and governed?

We support the proposals for the development of the LTDS delivery body that would develop, test and finalise the new Form of Statement (FoS). We welcome the establishment of an Ofgem-chaired industry working group with its broad

selection of stakeholders to assist in the development of the new LTDS and FoS standards.

Question 19: Would you like to nominate an individual to take part in the LTDS working group? Please set out reasons for their inclusion and any qualifying experience the nominated person has to function as a strong contributor to the group.

No response provided.

Part 2 - Key enablers for DSO

We support the further focus by Ofgem on the key enablers for Distribution System Operation (DSO) functions. We note the continued work of the Energy Networks (ENA) Open Networks Project in this field. Citizens Advice contributes to the Open Network Project via responses to consultations and through our membership of the Energy Networks Association (ENA) Open Networks Advisory Group. We would welcome continued liaison by Ofgem with the Open Networks project to ensure that DSO enablers are developed with the most comprehensive stakeholder input.

We have addressed our concerns and priorities regarding the development of DSO functions within a number of documents which we would refer you to, such as:

- Our response to the ENA Flexibility consultation, August 2019¹
- Our response to the BEIS Call for evidence on facilitating energy efficiency in the electricity system, September 2019²
- Our response to the Ofgem ED2 Open letter consultation, October 2019³

¹Citizens Advice response to the ENA Flexibility consultation, August 2019:
[https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/ENA%20Open%20Networks%20Project%20-%20Flexibility%20Consultation%202019%20-%20CA%20response%20%20\(1\).pdf](https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/ENA%20Open%20Networks%20Project%20-%20Flexibility%20Consultation%202019%20-%20CA%20response%20%20(1).pdf)

² Citizens Advice response to BEIS Call for evidence on facilitating energy efficiency in the electricity system:
<https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/Facilitating%20energy%20efficiency%20in%20the%20electricity%20system%20-%20Citizens%20Advice%20response%20to%20BEIS%20call%20for%20evidence.pdf>

³ Citizens Advice response to the Ofgem Open Letter Consultation on approach to setting the next electricity price control (RIIO-ED2):
[https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/Ofgem%20Open%20Letter%20Consultation%20ED2%20October%202019%20-%20CA%20response%20%20\(7\).pdf](https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/Ofgem%20Open%20Letter%20Consultation%20ED2%20October%202019%20-%20CA%20response%20%20(7).pdf)

- Our response to the Ofgem Position paper on DSO: Our approach and regulatory priorities, October 2019⁴
- Clear and in control: Energy consumers' views on data sharing and smart devices⁵

In addition to Ofgem's attention upon the LTDS, FoS, and DFES, we welcome prioritisation of:

- **Data issues**, especially the development of :
 - Lower voltage data collation and sharing including at the lowest voltage levels
 - Standards for collating and sharing data with third parties and ensuring openness of the data, as far as practicable and reasonable
 - Protections for the consumer with respect to their data usage (e.g. regarding the use put to consumers' smart meter data)
- Measures to ensure that **smaller entities** or community energy groups can participate readily within the flexibility market
- The establishment of **common standards for flexibility procurement and dispatch** including the transparency of contracts and dispatch to the maximum extent feasible
- The consideration of the **regulatory environment surrounding third party intermediaries** offering flexibility services such as aggregation. Consumer protections need to be put in place that are fit for the future for domestic consumers and small businesses to have confidence in the flexibility market. It may be valuable for the Ofgem DSO and Whole Systems team to ensure close coordination with the Ofgem Future Retail Market Design Team in this regard. We refer you to our 2 recent reports on this topic:
 - **Future for all: Making a future energy market work for everyone**⁶

⁴ Citizens Advice response to the Ofgem Position paper on DSO: Our approach and regulatory priorities, October 2019:
[https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/Ofgem%20Position%20paper%20on%20Distribution%20System%20Operation_%20our%20approach%20and%20regulatory%20priorities%20Oct%202019%20-%20CA%20response%20%20\(1\).pdf](https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/Ofgem%20Position%20paper%20on%20Distribution%20System%20Operation_%20our%20approach%20and%20regulatory%20priorities%20Oct%202019%20-%20CA%20response%20%20(1).pdf)

⁵ Clear and in control: Energy consumers' views on data sharing and smart devices, Citizens Advice, December 2019:
<https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Clear%20and%20in%20control%20-%20Energy%20consumers'%20views%20on%20data%20sharing%20and%20smart%20devices.pdf>

⁶ Future for all: Making a future energy market work for everyone, Citizens Advice, July 2019:
https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Future%20for%20all_FINAL.pdf

- **Zero Sum: How to prioritise consumer protections to ensure nobody is left behind on the path to net zero⁷**
- The consideration of **energy efficiency as an alternative** to traditional infrastructure investment decisions or flexibility procurement
- Considerations relating to the **separation of DSO functions** to facilitate cost transparency; development of licence conditions, outputs and incentives; and to alleviate concerns relating to perceived or actual conflicts of interests
- The consideration of **whether DNOs should be able to contract, offer or undertake flexibility services directly with domestic consumers** (such as aggregation or turn-down). We are concerned that DNOs contracting directly with domestic consumers will create a significant barrier to market development. We believe that a market based approach is more likely to benefit consumers as competition should drive lower costs and higher levels of service.
- **Measures to reward whole systems thinking**, including with or via third parties
- **Appropriate continued stakeholder engagement** by DNOs with wider stakeholder groups, including household consumers and micro-business consumers, so that the DNOs' plans for DSO activities can be shown to be driven by consumers' wants and needs
- **Protections for consumers** with respect to product and service provision which may be offered by DNOs or by third parties (such as aggregators or other flex providers)

Question 20: What network monitoring parameters would you like to have access to? At what frequency?

No response provided.

Question 21: What would enhanced 33kV network monitoring enable that cannot be undertaken today?

No response provided.

Question 22: What would enhanced 11kV network monitoring enable that cannot be undertaken today?

No response provided.

⁷ Zero Sum: How to prioritise consumer protections to ensure nobody is left behind on the path to net zero, Citizens Advice, January 2020: https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Future%20for%20all_FINAL.pdf

Question 23: What would enhanced LV network monitoring enable that cannot be undertaken today?

No response provided.

Question 24: What constraints in data systems architecture do you perceive are limiting network monitoring and visibility?

No response provided.

Question 25: What operational data is most important to prioritise opening up first and why?

We support the proposal to require DNOs to collate and publish operational data as a licence condition. The publication of this data should assist in enabling the DNOs and third parties to better balance the electricity system at the distribution level.

Question 26: How does a lack of access to this data impact the delivery of flexibility to the system?

No response provided.

Question 27: Are there any real or perceived conflicts of interest with DNOs owning and operating ANM platforms at scale? What additional protections could be required for ANM customers?

Active Network Management (ANM) systems will be essential to understand the operation of the energy system at the distribution level and to monitor and control the flows of energy within the system. ANM systems may also be part of the dispatch and operation of flexibility and voltage control within the local energy network. As DNOs currently own and operate these developing ANM systems, there are potential conflicts in that:

- Third party system developers and operators may be unable to compete with their own products and services which could lead to consumer detriment due to more costly in-house ANM systems being used
- Dispatch and operation of flexibility may be thought to be potentially unfair as there may be a perception that the DNOs would favour in-house solutions, or prefer certain third parties

Separation of the DSO functions relating to ANM may alleviate the perception or actuality of these potential conflicts of interest. Such separation could be achieved through:

- Requiring ring-fencing of DSO functions (including the procurement and operation of the ANM systems) from DNO functions but retaining both functions within the same legal entity
- Full legal separation of DNO and DSO activities
- Passing the DSO functions relating to ANM to an independent third party

At this stage, the costs and benefits relating to separation of DSO functions within or from the DNOs is not clear and therefore we would welcome further development and clarity regarding these matters. In principle, we do support the separation of DNO and DSO functions to establish transparency of costs and to assist in alleviating potential conflict of interest perceptions or actualities.

If ANM is undertaken by non-DNO third parties, there may be additional issues raised relating to data protection and data sharing, including potential access to Priority Services Register information. It may be worthwhile for Ofgem to work with consumer stakeholders to identify the full range of issues and possible solutions should third parties propose to operate ANMs.

Question 28: In order to preserve optionality over ANM scheme operations, what technical and commercial protections, such as technical ring-fencing, may be required?

See answer to Question 27.

Question 29: Please provide real world examples where lacking timely access to usable network data, or regulatory barriers, have limited your ability to provide a DSO function or support service. Please submit any relevant evidence and documentation of examples cited.

No response provided.

Question 30: Are there any other issues related to enabling DSO that have not been considered that you think are important? Please provide details of your considerations.

See response provided at 'Part 2 - Key enablers for DSO' (above Question 20). We have provided links to documents with full explanations and details regarding our considerations.

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